

## IN THE CLAIMS

1-42. (Canceled)

43. (Original) A biosensor comprising:

- a. a nucleic acid enzyme dependent on an ion to produce a product;
- b. a quencher, and
- c. a photodetector.

44. (Original) The biosensor of claim 43 comprising an array of nucleic acid enzymes.

45. (Original) The biosensor of claim 44, wherein the array comprises nucleic acid enzymes together having a range of ion specificities.

46. (Original) The biosensor of claim 43 further comprising a fluorophore.

47. (Original) A biosensor comprising:

- a. a nucleic acid enzyme dependent on an ion to produce a product;
- b. a fluorophore; and
- c. a photodetector.

48. (Original) A composition comprising a nucleic acid enzyme linked to a fluorophore.

49. (Original) A composition comprising a nucleic acid enzyme linked to a quencher.

50. (Original) A composition comprising a nucleic acid enzyme, substrate, fluorophore, and quencher.

51. (Original) A composition comprising a substrate for a nucleic acid enzyme linked to a quencher.

52. (Original) A composition comprising a substrate for a nucleic acid enzyme linked to a fluorophore.